

2/15/2018

[Dart Hawkesbury] Job Sheet - Gagnon-Donovan, Michelle

Prime only



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

Order 3306 D350-636-012
Job Sheet 172330



Part No: D350-636-012

Job Qty: 1 pcs

Part Name: Skidtube RH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/15/18

Job Tracking No:

Due Date: 3/6/18

Created By: Michelle Gagnon-Donovan

Type: SOLD

Description:

Note: DWG D3492 REV E SHEET 1, D2750-042 REV G SHEETS 1,2,5,9 IPP Rev:I 02.09.25 IPP Rev:J 06-03-23 As per Rev D IPP Rev:K 06-07.13 As per dsl9343 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verf:EC IPP Rev:M 08-04-22 DD verified:EC IPP Rev:N 08-09-23 revF DD verified:ec IPP Rev:O 09-02-06 per PAR09-010 DD verf:EC IPP Rev:P 10.06.22 revise seq110 DD verf:EC IPP Rev:Q 10.10.01 as per IIN revH DDverf:EC IPP REV:R 13.08.27 PER ECN13-594 DD VERF:JLM

Ship Via:

Bill of Materials



Container No: S047286



Part: D350-636-012

Job No: 172330

Serial No/Batch: S047286

Revision:

Inspector:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 03/02/18

Gloss Black
see up
attached
173784

1

Job Routing									
Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	3/5/18	3/5/18	0.00	0.00	Start Up Skid tubes-1		
110	Skid tubes	1 pcs	3/5/18	3/5/18	0.00	4.36	Skid tubes-4		
120	QC	1 pcs	3/5/18	3/5/18	0.00	0.00	QC10		
130	QC	1 pcs	3/5/18	3/5/18	0.00	0.00	QC5		
140	HandFinish	1 pcs	3/5/18	3/5/18	0.00	0.91	HandFinish1		
150	QC	1 pcs	3/5/18	3/5/18	0.00	0.00	QC7-2		
160	Skid tubes	1 pcs	3/5/18	3/5/18	0.00	4.36	Skid tubes-1		
170	QC	1 pcs	3/5/18	3/5/18	0.00	0.00	QC10		
180	QC	1 pcs	3/5/18	3/5/18	0.00	0.00	QC5		
190	HandFinish	1 pcs	3/5/18	3/5/18	0.00	0.91	HandFinish2		
200	SprayPaint	1 pcs	3/5/18	3/5/18	0.00	0.69	Spray Paint		
210	QC	1 pcs	3/5/18	3/5/18	0.00	0.00	QC14		
230	HandFinish	1 pcs	3/6/18	3/6/18	0.00	0.91	HandFinish4		
240	QC	1 pcs	3/6/18	3/6/18	0.00	0.00	QC5		
250	Packaging	1 pcs	3/6/18	3/6/18	0.00	0.00	Packaging1-3		
260	QC	1 pcs	3/6/18	3/6/18	0.00	0.00	QC4		
265	DC	1 pcs	3/6/18	3/6/18	0.00	0.00	DC		
270	Packaging	1 pcs	3/6/18	3/6/18	0.00	0.00	Packaging3-1		
280	QC21-FG	1 Ea	3/6/18	3/6/18	0.00	0.00	QC21		
330	Packaging	1 pcs	3/6/18	3/6/18	0.00	0.00	Packaging2		

Part Op 110 - 1- Pick D2600-3 Bent Drill pilot holes as per Dwg D2750 sheet 4 (D2750-2 details). Drill using drill Jig DT8150 & Descriptions: DT8863A for second side only DT8863B for first side (detail K) 4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting. Open to 0.500" using hole saw. VERIFY AND RECORD FWD BEND ANGLE. 6- Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297". 7- Open up holes of Detail J to 0.297" (total of 2 holes per side) 8- Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004 9- Grind welds flush as per Dwg D2750

160 - 1- Open up holes of Detail L using hole saw and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750. 2- Open up holes of Detail K using hole saw to 0.750" (total of 4 holes per side) as per dwg D2750. 3- Open float holes using uni-bit to .500" (4 per Side) 4- Chamfer holes of Detail K, L, ground handling and float holes per dwg D2750 (welding instructions on sheet 9) 5- Deburr and blow out all chips from inside of tube 6- Prepare tube for welding, remove alodine as required. 7- Bond web D2739 in place as per QSI 015, let cure for 12hrs. A/R Sikaflex-291 batch: M138707 exp. date: 47.215 ***ATTN: USE I-BEAM LOCATION AID (BLADE FITTING)*** 8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 9) A/R Aluminum Rod batch: 038611 9- At section AP-AP drill out x-bolt spacer to 0.404" 10-Grind welds flush as per Dwg D2750 11- Spot face ground handling holes section (total of 4 places per side) as per dwg D2750 12- Deburr holes, ensure tube is free of all scratches before sending to paint.

180 - ***VERIFY C'BOARD IS GOOD***

190 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

200 - 1- PRIME AS PER DWG AND QSI 005 4.2 PRIMER PRC DESOTO 515X349 BATCH: 138747 2-

PAINT WHITE AS PER DWG AND QSI 005 4.2 PAINT BATCH: 138823 Black

210 - Inspect for foreign object per QSI 024

230 - 1-Install inserts as per dwg D2750 2-Inspect for Foreign Objects 3-Install blade fitting D3488-042, wearshoes and ground handling hardware as per dwg D2750 SIKAFLEX 241 BATCH: _____ EXP DATE: _____ 4-

assemble o'ring to plug as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: _____ 5-Coat all exposed fasteners with "LPS Procyon" batch: _____

265 - record fwd angle: 89.90 Photocopy blue file and type labels per PPP D350-636-012 CHG 007

270 - Package as per PPP D350-636-012

Prime only

Order 3306

*Then paint black

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
D2600-3-BENT-RH	Extrusion Bent RH	1 Ea (1 ea)	90-Start up Operation	5043941
D2744	Cap	1 Ea (1 ea)	90-Start up Operation	5038835
D2739	350 I-Beam	1 Ea (1 ea)	160-Skidtubes	5040302
D2743	Crossbolt Spacer	8 Ea (8 ea)	160-Skidtubes	5026588
D3490-1	Cross Bolt Spacer	4 Ea (4 ea)	160-Skidtubes	5017322
D3490-3	Cross Bolt Spacer	4 Ea (4 ea)	160-Skidtubes	5040318
ALS4-1032-225	Rivnut	38 Ea (38 ea)	230-HandFinish	
AN3C5A	Bolt	34 Ea (34 ea)	230-HandFinish	
AN3C6A	Bolt	4 Ea (4 ea)	230-HandFinish	
AN6C44A	Bolt	4 Ea (4 ea)	230-HandFinish	
AN8C35A	Bolt	1 Ea (1 ea)	230-HandFinish	
D2745	Bushing	8 Ea (8 ea)	230-HandFinish	
D3488-042	Blade Fitting RH	1 Ea (1 ea)	230-HandFinish	
D3492-1	Plug	8 Ea (8 ea)	230-HandFinish	
D3492-3	Plug	8 Ea (8 ea)	230-HandFinish	
D3535-25	Wearplate Center	1 Ea (1 ea)	230-HandFinish	
D3536-25	Gasket Center	1 Ea (1 ea)	230-HandFinish	
D3537-1	Wearpad	3 Ea (3 ea)	230-HandFinish	
D3631-1	Washer	8 Ea (8 ea)	230-HandFinish	
D3791-1	Wearpad	1 Ea (1 ea)	230-HandFinish	
D3793-1	Wearplate Fwd	1 Ea (1 ea)	230-HandFinish	
D3793-3	Wearplate Aft	1 Ea (1 ea)	230-HandFinish	
D3794-1	Gasket Fwd	1 Ea (1 ea)	230-HandFinish	
D3794-3	Gasket Aft	1 Ea (1 ea)	230-HandFinish	
MS21043-6	Nut	4 Ea (4 ea)	230-HandFinish	
MS21083C8	Nut	1 Ea (1 ea)	230-HandFinish	
NAS1149C0332R	Washer	38 Ea (38 ea)	230-HandFinish	
NAS1149C0832R	Washer	1 Ea (1 ea)	230-HandFinish	
NAS1515H3L	Washer	4 Ea (4 ea)	230-HandFinish	
NAS1611-010	O-Ring	8 Ea (8 ea)	230-HandFinish	
NAS1611-013	O-Ring	8 Ea (8 ea)	230-HandFinish	
AN8C21A	Bolt	2 Ea (2 ea)	250-Packaging	
D2741	Replacement Blade	1 Ea (1 ea)	250-Packaging	
D3493-1	Washer	2 Ea (2 ea)	250-Packaging	
D3532-1	Spacer	2 Ea (2 ea)	250-Packaging	
MS21083C8	Nut	2 Ea (2 ea)	250-Packaging	
NAS1149D0863J	Washer	2 Ea (2 ea)	250-Packaging	

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D2600-3-BENT-RH	1	0	0
	D2744	1	28	0
160-Skidtubes	D2739	1	27	0
	D2743	8	151	0
	D3490-1	4	128	0
	D3490-3	4	107	0
230-HandFinish	ALS4-1032-225	38	1,079	0
	AN3C5A	34	807	0
	AN3C6A	4	170	0
	AN6C44A	4	447	0
	AN8C35A	1	73	0
	D2745	8	105	0
	D3488-042	1	14	0
	D3492-1	8	99	0
	D3492-3	8	152	0
	D3535-25	1	25	0
	D3536-25	1	16	0
	D3537-1	3	105	0
	D3631-1	8	54	0
	D3791-1	1	11	0
	D3793-1	1	28	0
	D3793-3	1	30	0
	D3794-1	1	20	0
	D3794-3	1	10	0
	MS21043-6	4	123	0
	MS21083C8	1	95	0
	NAS1149C0332R	38	2,087	0
	NAS1149C0832R	1	98	0
	NAS1515H3L	4	295	0
	NAS1611-010	8	279	0
	NAS1611-013	8	367	0
250-Packaging	AN8C21A	2	187	0
	D2741	1	84	0
	D3493-1	2	44	0
	D3532-1	2	58	0
	MS21083C8	2	95	0
	NAS1149D0863J	2	171	0
Part Specifications				
Specifications could not be found.				

Plex 2/15/18 11:31 AM Dart.Gagnon.Michelle

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 172330 *md*

FEB 15 2018

D3492-XX PLUG
(SEE TABLE)

NAS1611 O-RING
(SEE TABLE)

D3492-XXX PLUG PARTS LIST

QTY -041	QTY -043	QTY -045	QTY -047	QTY -049	QTY -051	QTY -053	QTY -055	PART NUMBER	DESCRIPTION
X								D3492-041	PLUG ASSEMBLY
	X							D3492-043	PLUG ASSEMBLY
		X						D3492-045	PLUG ASSEMBLY
			X					D3492-047	PLUG ASSEMBLY
				X				D3492-049	PLUG ASSEMBLY
					X			D3492-051	PLUG ASSEMBLY
						X		D3492-053	PLUG ASSEMBLY
							X	D3492-055	PLUG ASSEMBLY
1								D3492-1	PLUG
	1							D3492-3	PLUG
		1						D3492-5	PLUG
			1					D3492-7	PLUG
				1				D3492-9	PLUG
					1			D3492-11	PLUG
						1		D3492-13	PLUG
							1	D3492-15	PLUG
		1						NAS1611-005	O-RING
			1					NAS1611-007	O-RING
1						1		NAS1611-010	O-RING
							1	NAS1611-012	O-RING
	1							NAS1611-013	O-RING
					1		1	NAS1611-015	O-RING
				1				NAS1611-016	O-RING

NOTES:

1) O-RING: POSSIBLE SUPPLIER P/N: NAS1611-XXX OR PARKER 2-XXX

RELEASED
2013-11-13

E	ADD -055 PLUG ASSY & -15 PLUG	AP	13.08.08
D	INCORPORATED DEO D3492-C-1. SHT 2 DIM C FOR -1 WAS 0.055. (SEE CART11-049)	AJS	11.05.24
C	ADD -049-051-053, CHANGE DRAWING FORMAT	PH	07.10.05
B	ADD -047: UPDATE DIM A FOR -045	PH	06.05.11
A	NEW ISSUE	PH	06.01.04
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	<i>AJS</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>MD</i>	D3492	SHEET 1 OF 2
APPROVED	<i>MD</i>	TITLE	SCALE
DE APPR.	<i>MD</i>	PLUG	NTS
DATE	13.08.08	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR REPRODUCED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2
OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
FINISH WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

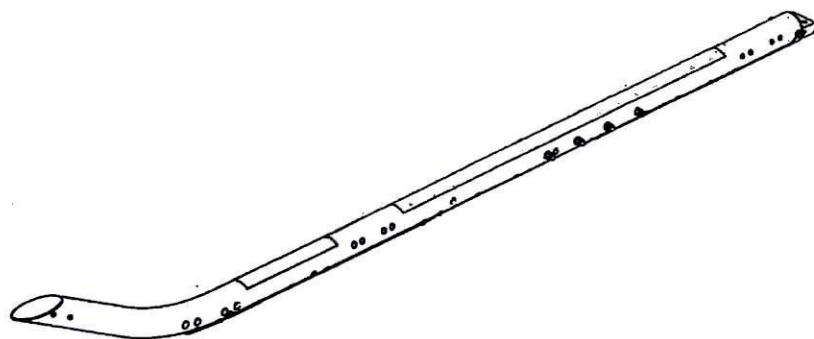
RELEASED
2013-08-13
ND

G	CORRECTED TOLERANCE ON $\phi 0.500$ THRU HOLE: IS $+0.010/-0.000$, WAS $+0.100/-0.000$ (ZN B3-4, B2-5); ADD VIEW TO CONTROL FWD BEND ORIENTATION (ZN D-1-4/-5/-6/-7); UPDATED FINISH OPTIONS; INSIDE OF TUBE NO LONGER SPRAYED WITH LPS-3; REASON: PAR13-276 AND NCR13-2757	MB	13.07.11
F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/3 REPLACES D3535-13/35 (ZN C8-1); D3794-1/3 REPLACES D3536-13/35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/RAFT SADDLE REMOVED (8 PL); WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H3L; REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN6-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	MIN		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.07.11		

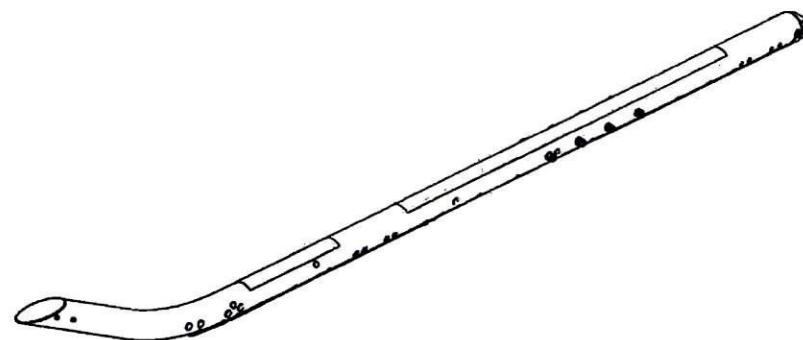
DART AEROSPACE USA, INC.

KENT, WA
DRAWING NO. **D2750**
REV. G
SHEET 1 OF 11
TITLE **350 SKIDTUBE ASSEMBLY**
SCALE
NTS

COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE USA, INC.



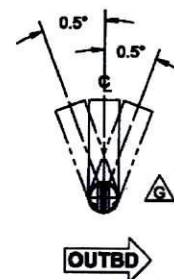
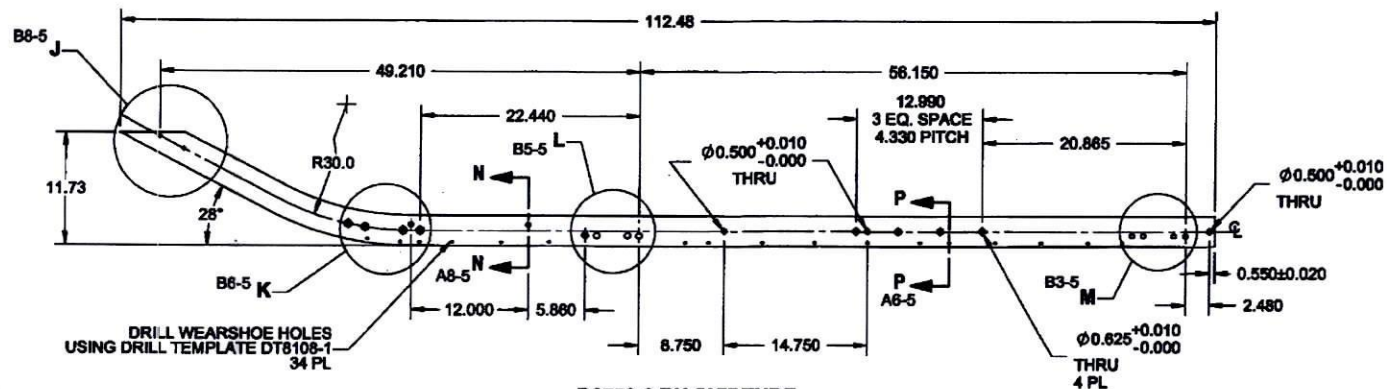
D2750-041 350 SKIDTUBE ASSEMBLY, LH



D2750-042 350 SKIDTUBE ASSEMBLY, RH

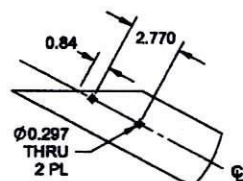
RELEASED
2013-08-13
MD

DESIGN	MM	DART AEROSPACE USA, INC.	
DRAWN		KENT, WA	
CHECKED		DRAWING NO. D2750	REV. G
MFG. APPR.		SHEET 2 OF 11	
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	13.07.11	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN PERMISSION OF DART AEROSPACE USA, INC.	

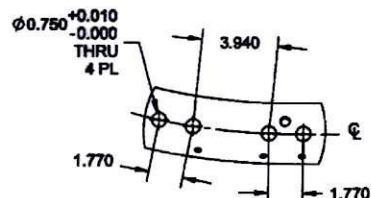


MAX ALLOWABLE
TWIST ON FWD BEND
(VIEWED LOOKING FWD)

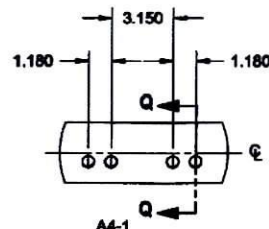
D2750-2 RH SKIDTUBE



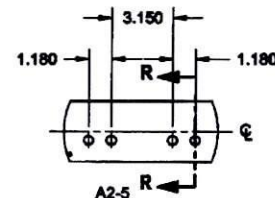
D8-5
DETAIL J
SCALE 2X



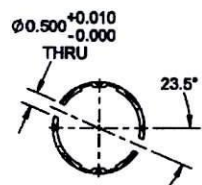
C7-5
DETAIL K
SCALE 2X



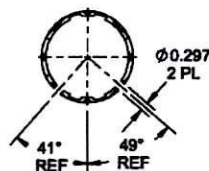
D8-5
DETAIL L
SCALE 2X



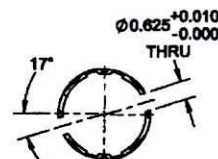
C3-5
DETAIL M
SCALE 2X



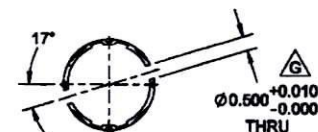
C8-5
SECTION N-N
SCALE 3X, 2 PL



C4-5
SECTION P-P
SCALE 3X, 17 PL



B5-5
SECTION Q-Q
SCALE 3X, 4 PL



B3-5
SECTION R-R
SCALE 3X, 4 PL

DESIGN	MM	DART AEROSPACE USA, INC.	
DRAWN		KENT, WA	
CHECKED		DRAWING NO. D2750	REV. G
MFG. APPR.		SHEET 5 OF 11	
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	
DATE	13.07.11	NTS	

COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS UNCLASSIFIED AND IS AVAILABLE TO THE PUBLIC EXCEPT WHERE IT IS
NOT TO BE RELEASED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM WITHOUT THE WRITTEN
PERMISSION OF DART AEROSPACE USA, INC.

RELEASED
2013-08-13

